

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing Of Claims:

1.-14. (Canceled)

15. (New) An image recording system, comprising:

at least one image sensor;

at least one optical unit;

at least one housing; and

a fastening arrangement for fixing the image sensor in position relative to the housing,

wherein:

the housing includes an arrangement for accommodating the optical unit, and

the housing includes a first alignment arrangement on an inside in order to align a main axis of the image sensor and a main axis of the optical unit relative to each other.

16. (New) The image recording system as recited in Claim 15, wherein the image recording system is used in a motor vehicle.

17. (New) The image recording system as recited in Claim 15, wherein the first alignment arrangement permits an attachment-free, axial alignment of the main axis of the image sensor and the main axis of the optical unit relative to each other.

18. (New) The image recording system as recited in Claim 15, wherein the arrangement for accommodating the optical unit includes a threaded mount.

19. (New) The image recording system as recited in Claim 15, further comprising:

a second alignment arrangement; and

a printed circuit board on which the image sensor is arranged, the printed circuit board being able to be positioned by the second alignment arrangement relative to the housing.

20. (New) The image recording system as recited in Claim 19, wherein the second alignment arrangement includes at least one spacer.

21. (New) The image recording system as recited in Claim 15, wherein:
the fastening arrangement includes at least one of an adhesive agent, at least one screw-connection arrangement, and at least one clamping-connection arrangement corresponding to at least one tension spring.
22. (New) The image recording system as recited in Claim 15, wherein at least one part of the first alignment arrangement is adjustable.
23. (New) The image recording system as recited in Claim 15, wherein the first alignment arrangement includes at least three spacers for setting the image sensor apart from the housing, at least two of the at least three spacers being adjustable in a spacing direction.
24. (New) The image recording system as recited in Claim 15, further comprising:
an intermediate support supported in a ball bearing and on which the image sensor is disposed.
25. (New) The image recording system as recited in Claim 24, wherein the ball bearing is formed from edge areas of the intermediate support that in each case are in the shape of a spherical lateral surface and regions of the housing member that are in the shape of a spherical lateral surface, which intermesh with form locking in an interior of the housing.
26. (New) The image recording system as recited in Claim 24, further comprising:
adjusting screws braced on one side on the housing, and on another side, one of directly and indirectly on the intermediate support.
27. (New) A method for producing an image recording system, comprising:
implementing an attachment-free, axial alignment of a main axis of an image sensor of the image recording system and a main axis of an optical unit of the image recording system relative to each other by an alignment arrangement mounted on an inner side of a housing of the image recording system; and
radially aligning the main axis of the image sensor and the main axis of the optical unit relative to each other as a function of image data of the image sensor in such a way that the image sensor generates image data from a test pattern located outside of the housing.

28. (New) The method as recited in Claim 27, further comprising:

after the radially aligning step, fixing the image sensor in position relative to the housing by a fastening arrangement that includes at least one of an adhesive agent, at least one screw-connection arrangement, and at least one clamping-connection arrangement including at least one tension spring.

29. (New) The method as recited in Claim 27, further comprising:

setting an image sharpness as a function of the image data from the test pattern by adjusting a position of the optical unit in the housing using an adjusting mechanism.

30. (New) The method as recited in Claim 27, further comprising:

as a function of the image data from the test pattern, ascertaining and optionally setting at least one of:

at least one adjustment parameter of the image sensor corresponding to at least one adjustment parameter for an intrinsic calibration, and
at least one adjustment parameter of a fixed pattern noise correction.